

LBAM - USDA Partial Response, June 11, 2008

Answers to a portion of questions Congressman Sam Farr (D-Carmel) provided USDA officials during hearing in early 2008. Received June 11, 2008.

Mr. Farr: What is the process for "blacklisting" an invasive pest like LBAM?

Response: APHIS has a process in place to determine if an invasive plant pest, such as the light brown apple moth (LBAM), is of "quarantine significance" and "actionable."

To determine if a pest is quarantine significant, we evaluate its risk by determining its origin, prevalence, distribution, and the extent to which management efforts can contain it. In addition, we determine the potential economic and environmental impact of the pest. If we determine a pest to be quarantine significant, we establish and enforce regulations to restrict or prohibit the entry of host commodities. The host commodities could serve as a pathway for the pest's introduction into the United States from infested countries. Before the 2007 California outbreak, LBAM was determined to have a high pest risk and, therefore, to be quarantine significant. This determination was validated by a risk assessment we completed in October 2007 that concluded if the LBAM became established nationwide, losses would approach \$100 million per year for just four of LBAM's more than 2,000 hosts (apples, grapes, oranges, and pears). LBAM establishment could also damage the environment. If the infestation is not eradicated, the use of conventional insecticides would increase, thus increasing the pesticide load to the environment.

If a quarantine significant pest does become introduced, we must determine whether or not it is actionable. Actionable pests are those that we can either eradicate or control through domestic regulatory quarantines and mitigation treatments such as pesticides, pheromones, biological control, or sterile insect technology. To determine if a pest is actionable, APHIS maintains a New Pest Advisory Group (NPAG). When the NPAG is notified of a new pest, they will determine whether or not that pest is present, poses an imminent threat, and should be considered a quarantine pest. If they determine that the pest should be considered a quarantine pest, the

NPAG will prepare a report for APHIS' Plant Protection and Quarantine unit in which they will recommend possible actions. Before finalizing this report, they may convene a meeting with subject matter experts from universities and Federal and State agencies to gather more information on the pest. If the NPAG determines that we can eradicate or control a pest through regulatory and mitigation activities, it will recommend such action and designate the pest as actionable. If, however, the group determines that neither eradication nor control is feasible based on the extent of infestation, treatment availability, or resources required, it will recommend that no action be taken. After APHIS confirmed the first LBAM detection in March 2007, the NPAG classified LBAM as actionable and recommended that we pursue eradication.

Mr. Farr: What are the specific regulatory hurdles for a pest to be included on the blacklist?

Response: If we determine a pest to be quarantine significant, we establish and enforce regulations to restrict or prohibit the entry or movement of host commodities. For example, in May 2007, we issued a Federal Order to restrict the interstate movement of certain regulated articles from several counties in California and the entire State of Hawaii to prevent the spread of LBAM. If a quarantine significant pest becomes introduced, we rely on our New Pest Advisory Group (NPAG) to determine if the pest is actionable. If it is, we will begin efforts to eradicate or control the pest through regulatory and mitigation activities.

Mr. Farr: Has a blacklisted (insect) pest ever been reclassified? If so, which pest(s) and what were the circumstances?

Response: There has been at least one instance where a pest has been reclassified. Sugarcane rust was considered an actionable pest of quarantine significance. Therefore, we took regulatory action to prevent its introduction into the United States through the movement of host commodities. However, the pest was eventually introduced and APHIS later determined that the pest could not be eradicated.

Instead, we concluded that it could be effectively managed by revising production practices, since the pest affects only sugarcane and sugarcane rust resistant varieties are available.

Mr. Farr: When was LBAM blacklisted by the USDA/APHIS?

Response: In 1957, the Agricultural Research Service's Plant Pest Control Division, which was the forbearer of APHIS' Plant Protection and Quarantine program, issued a report on LBAM titled "Insect Not Known to Occur in the United States". This report summarized the pest's threat to agriculture. The 1984 version of this report re-evaluated the threat with similar findings. These reports assessed LBAM's biology, host range, and impact. They indicated that LBAM caused "as much as 75 percent" damage to fruit production during severe outbreaks in Australia and New Zealand. They also noted that when LBAM populations are abundant, they "may cause as much as 25 percent loss of the apple crop."

In 2003, APHIS contracted the University of Minnesota's Department of Entomology to conduct a mini-risk assessment on LBAM, which re-verified LBAM as a significant agricultural pest threat. This assessment indicated that LBAM "was considered highly likely of becoming established in the U.S.; the consequences of its establishment for U.S. agricultural and natural ecosystems were judged to be high (i.e., severe)." On May 2, 2007, APHIS issued a Federal Order to prevent LBAM spread. This Order restricted the interstate movement of certain regulated articles, including nursery stock, cut flowers, and greenery, from several counties in California and the State of Hawaii.

Mr. Farr: Can USDA/APHIS produce the original documents that were relied upon to place LBAM on the blacklist?

Response: The [documents](#) are submitted for the record.

Mr. Farr: Was the U.S. the first country to blacklist LBAM? If not, please note which countries and when the classification occurred?

Response: The United States was not the first country to establish phytosanitary import restrictions for LBAM to prevent the pest's introduction through international trade. Each of the following countries did so before the pest's detection in California: Canada, Chile, Mexico, Peru, South Africa, South Korea, Thailand, and South Africa. APHIS does not have access to the dates when these classifications occurred.

Mr. Farr: Was the September 2003 "Mini Risk Assessment" by the University of Minnesota's Department of Entomology the primary study relied upon to maintain LBAM on the blacklist? If not, what studies were referenced?

Response: We initially designated the LBAM as a Class A quarantine pest in 1984. This designation was based on LBAM reports issued by USDA in 1957 and 1984 entitled "Insects Not Known to Occur in the United States". These reports assessed the biology, host range, and impact of LBAM. The 2003 risk assessment confirmed the earlier conclusions to restrict or prohibit the entry of LBAM host commodities. In November 2007, APHIS completed an economic analysis in response to a recommendation from the LBAM Technical Working Group (TWG), which is comprised of international LBAM experts. This analysis verified the threat posed by LBAM and supported the need to regulate the movement of LBAM host commodities from infested areas. We did not maintain the LBAM as a Class A quarantine pest based primarily on a single study. Rather, we considered each of these studies, each of the recommendations from the TWG, and all other available knowledge of LBAM distribution in the United States and its potential impacts on agricultural and natural systems.

Mr. Farr: At the time of classification, was a biological assessment of LBAM conducted by USDA/APHIS? Is USDA/APHIS presently

conducting a biological assessment of LBAM, as recommended by the USDA-led Technical Working Group (TWG)? If so, when will the assessment be completed?

Response: In 1957 and 1984, USDA issued reports entitled "Insects Not Known to Occur in the United States". These reports assessed the biology, host range, and impact of LBAM. In 2007, we conducted an economic assessment on LBAM in response to a recommendation from the Technical Working Group. This assessment, which also assessed the biological impact of the pest, concluded that LBAM could become established in most of the United States, with the west coast and the entire southern United States at the highest risk. In addition, it found that if the LBAM became established across most of the United States, the economic impact would approach \$100 million per year for only four of LBAM's more than 2,000 hosts (apples, grapes, oranges, and pears).

Mr. Farr: At the time of classification, was an economic assessment (i.e., a cost-benefit analysis to assess comparative risks of various options for managing LBAM, including managing/containing the pest and eradication) conducted by USDA/APHIS? Is USDA/APHIS presently conducting an economic assessment of LBAM, as recommended by TWG? If so, when will the assessment be completed?

Response: In 1957 and 1984, USDA issued reports titled "Insects Not Known to Occur in the United States." These reports assessed the biology, host range, and economic impact of LBAM. They identified LBAM as a pest of quarantine significance and the most significant plant pest in New Zealand.

In 2007, we conducted an economic assessment on LBAM in response to a recommendation from the Technical Working Group. This assessment concluded that LBAM could become established in most of the United States, with the west coast and the entire southern United States at the highest risk. In addition, it found that if the LBAM became established across most of the United States, the economic impact would approach \$100 million per year for only four of LBAM's

more than 2,000 hosts (apples, grapes, oranges, and pears). APHIS is also currently conducting an economic assessment on LBAM that is more comprehensive than the one conducted in 2007. We expect to complete this assessment by this fall.

Mr. Farr: What countries have Sanitary and Phytosanitary Measures in place for LBAM and when were the measures established?

Response: Each of the following countries instituted Sanitary and phytosanitary measures for LBAM before the pest's detection in California: Canada, Chile, Mexico, Peru, South Africa, South Korea, Thailand, and South Africa. APHIS does not have access to the dates when these measures were established.